PROCEEDINGS

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DESCRIPTIONS OF SIX NEW RODENTS OF THE GENERA APLODONTIA AND THOMOMYS.

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Specimens of Aplodontia from a few miles south of the Cascades of the Columbia—apparently the type locality of A. rufa—differ specifically from the small coast animal commonly mistaken for rufa. Comparison of the typical form with specimens from the Olympic Mts., the coast of Oregon, and Point Reyes, California, shows that several very distinct species remain undescribed. The northern form of the Sierra-Cascade species also proves to be different from typical A. major. All of these are here described, and with them two new Pocket Gophers from northwestern Washington.

Aplodontia pacifica sp nov.

Type from Newport, mouth of Yaquina Bay, Oregon. No. 77372 $\,$ Q ad. U. S. Nat. Mus., Biological Survey Coll. Collected March 20, 1896, by B. J. Bretherton. Original No. 2219.

Characters.—Size small, by far the smallest of the known species; ear longer (higher) than in any of the others; color darker and richer; white spot at base of ear usually distinct.

Color.—Upper parts in winter pelage fulvous brown, strongly mixed with black hairs, the fulvous strongest on flanks and sides of neck, least apparent on head and rump, which parts are sepia or bister, becoming dusky on nose; top of head strongly mixed with black hairs; cheeks suffused with fulvous; under parts plumbeous, strongly washed with fulvous; legs, feet and tail grizzled grayish-dusky.

Cranial characters.—Skull small, light, and relatively narrow; zygomata less spreading than in the other species; rostrum slender; interorbital constriction rather broad; palate narrow. Contrasted with A. rufa the

skull is decidedly smaller and narrower, the rostrum longer and much more slender; the zygomata very narrow, not spreading or bowing outward as in *rufa*; audital tubes very much more slender and much shorter; frontal platform between orbits and rostrum (seen from above) very much smaller, narrower, and more rounded laterally—less flattened.

Dental characters.—Small upper premolar very large, at least twice as large as in rufa or major, molars actually as large as—relatively much larger than—in rufa.

Measurements.—Type specimen: Total length 304; tail vertebræ 22; hind foot (in dry skin, moistened) 48.

Aplodontia phæa sp. nov.

Type from Pt. Reyes, Marin Co., California. No. $\frac{26945}{36275}$ \circlearrowleft ad. Merriam Coll. Collected August 1, 1886, by C. A. Allen. Orig. No. 142.

Characters.—Size small; coloration (in July and August specimens) remarkably uniform grizzled bister brown without rufous or fulvous; ears much smaller (shorter) than in A. pacifica.

Cranial characters.—Skull of medium size, larger than that of pacifica, smaller than that of rufa; zygomata spreading but less bowed out than in rufa, the anterior root standing out squarely with a well developed angle; rostrum slender; nasals short, abruptly narrowed posteriorly, and ending considerably in front of posterior plane of premaxillæ; interorbital region broad; audital bullæ and tubes intermediate in size between those of rufa and pacifica, the tubes of same length as in pacifica—much shorter than in rufa; incisive foramina small and compressed or 'pinched in'; small upper premolar about as in rufa—decidedly smaller than in pacifica.

Measurements.—Type specimen: Total length 330; tail vertebræ 30; hind foot (in dry skin, moistened) 55.

Aplodontia olympica sp. nov.

Type from Queniult Lake, Olympic Mts., Washington. No. 89549 ♂yg.-ad. U. S. National Museum, Biological Survey Coll. Collected July 24, 1897, by R. T. Young. Original No. 309.

Characters.—Similar to A. rufa but larger and darker; upper parts less 'reddish' or fulvous; nose darker; white spot at base of ear absent or poorly developed.

Cranial characters.—The skull of A. olympica differs from that of A. rufa in the following characters: interorbital constriction decidedly narrower (measuring from 8.5 to 10 mm. in 8 adults as contrasted with 11 mm. in the narrowest of the rufa series); zygomata standing out more strongly anteriorly with a thickened elbow at the angle; jugal not obliquely expanded but developing a postorbital ridge or process which forms the only upward projection from the arch—the posterior projection in rufa, formed by the thickened anterior end of the squamosal, being absent; audital bulke, particularly the long bony tubes, much smaller; auditory meatus much smaller and more nearly a complete circle, with notch on upper side smaller and narrower.

Measurements.—Type specimen: Total length 350; tail vertebræ 35; hind foot 55.

Aplodontia major rainieri subsp. nov.

Type from Paradise Creek, south side Mt. Rainier, Washington (alt., 5200 ft.). No 90144 of ad. U. S. Nat. Mus., Biological Survey Coll. Collected August 6, 1897, by Vernon Bailey. Orig. No. 6122.

Characters.—Similar to A. major but paler and grayer throughout, particularly the underparts and region around mouth; whiskers mainly white instead of black; audital tubes smaller; incisive foramina shorter and slightly more open; basioccipital notch shallower; jugal narrower and more slender throughout.

Measurements.—Type specimen: Total length 375; tail vertebræ 33; hind foot 62.

Thomomys melanops sp. nov.

Type from timberline at head of Soleduc River, Olympic Mts., Washington. No. 90630 ♀ ad. U. S. Nat. Mus., Biological Survey Coll. Collected Aug. 28, 1897, by Vernon Bailey. Orig. No. 6219.

Characters.—Size small; coloration as in T. mazama—nose, space round eye and large postauricular patch (embracing ear) slate black in strong contrast to dull chestnut of upper parts; under parts dark plumbeous, washed with buffy fulvous; feet and wrists white. T. douglasi from the north side of the Columbia River has the entire head reddish chestnut, concolor with the back, but in cranial characters agrees best with the present species.

Cranial characters.—Skull similar to that of douglasi but smaller; interparietal shorter posteriorly, barely notching supraoccipital; mastoid bulke smaller: basioccipital less excavated by audital bulke; anterior root of zygoma (seen from above) broader and more squarely truncate, infringing more on frontals.

Measurements.—Type specimen: Total length 206; tail vertebræ 63; hind foot 27.

Thomomys douglasi yelmensis subsp. nov.

Type from Tenino, Yelm Prairie, Washington. No. $\frac{34377}{43777} \sigma$ ad. U.S. Nat. Mus., Biological Survey Coll. Collected Oct. 24, 1891, by C. P. Streator. Orig. No. 1385.

Characters.—Similar to T. douglasi but very much paler; face with the dark markings of the mountain species.

Cranial characters.—Skull like that of douglasi but interparietal larger; frontals depressed interorbitally; angle of mandible standing out farther and projecting anteriorly so as to form a distinct hook; incisors broader and thicker.

Measurements.—Type specimen: Total length 222; tail vertebræ 68; hind foot 32.